

February 8, 2006

Mr. Frank J. Cianfrani
Chief, Regulatory Branch
U.S Army Corps of Engineers
Philadelphia District, 100 Penn Square East
Philadelphia, PA 19107-3390

Attn: Mr. Kevin Faust

**Re: *Biological Opinion, Timmons/Parsons Pepper Creek Subdivision*
(CENAP-OP-R-200500154-26)**

Dear Mr. Cianfrani:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion (BO) based on our review of the consultant's biological assessment (BA) for project impacts to bald eagles (*Haliaeetus leucocephalus*), a federally listed threatened species, resulting from development of a 282 lot subdivision at Pepper Creek. The project is located south of Piney Neck Road and east of U.S. Highway 113 near Dagsboro, in Sussex County, Delaware. We are providing comments in accordance with Section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884, as amended:16 U.S.C. 1531 et seq.).

This Biological Opinion is based on information contained in the Pepper Creek BA (January 5, 2005) provided by the project consultant, Biological Research Associates, and Supplement to the BA transmitted by developers attorney, Venable (October 4, 2005). The U.S. Army Corps of Engineers (Corps) initiated formal section 7 Consultation with the Service on August 10, 2005. A complete administrative record of this consultation is on file at this office (see Appendix A).

I. CONSULTATION HISTORY

In June 2000, the Delaware Department of Natural Resources and Environmental Control (DNREC) informed the Service of the proposed project and the potential for adverse impacts to a nesting pair of bald eagles. In August 2000, the initial project consultant (Atlantic Resource Management, Inc.) provided the Service with a preliminary design plan that revealed a portion of lots to be developed within the primary protection zone (0-330 feet) and secondary protection zone (330-750 feet) around a bald eagle nest tree. It was later decided by the developer (Mr. Timmons) to incorporate a second project, shoreline stabilization and restoration, in conjunction with the proposed residential development. After filing permit applications with the State and

County, significant delays ensued during the review process. Mr. Timmons later acquired the services of a new environmental consultant, Biological Research Associates Inc., to provide an assessment of potential impacts to bald eagles as a result of the residential and shoreline stabilization actions. The BA was completed in January 2005, and finally submitted to the Corps in August 2005, which then initiated formal section 7 Consultation with the Service.

II. BIOLOGICAL OPINION

DESCRIPTION OF PROPOSED ACTIONS

The Pepper Creek project is a 282 lot subdivision to be developed mostly within a former agricultural field and to include a shoreline stabilization and restoration feature to reduce erosion and sediment loading to Pepper Creek (figure 1). The project will require Corps review to authorize impacts to waters of the United States. The shoreline activities will involve installation of 2,480 linear feet of coconut fiber logs at mean low water line, construction of 166 linear feet of stone revetment along the base of the steep, eroding upland bank, placement of 90,200 square feet (2.01 acres) of sandy backfill, and planting smooth cordgrass (*Spartina alterniflora*) seedlings on 18" centers on filled areas to create 2.01 acres of intertidal wetlands.

The residential community will be developed (in multiple phases) over several years. Sussex County requirements allow for no more than 80 residences to be constructed per year. The applicant (developer) has planned for a four-phased development scheme. Infrastructure will include underground electric and sewer lines, roadways, and a wastewater pump station. The duration of the project is expected to take several years to complete, with the last phase beginning in 2009.

Subsequent to submission of the BA, the project developer(s) have modified their project description to incorporate conservation measures which will compensate for potential impacts to bald eagles:

“On lots located immediately adjacent to Pepper Creek, the developer will maintain certain trees in the zones located 50 feet and 20 feet from the shoreline. Within 50 feet of the shoreline, large loblolly pines (diameter over 14 inches) will not be removed. Lower branches may be trimmed to maintain view. Within 20 feet from the shoreline, trees with a diameter over 14 inches that provide a buffer for the above noted loblolly pines will not be removed. The developer will identify any pertinent conditions that are included in the Section 404 permit when it transfers property to owners” (Venable letter, October 14, 2005).

The developer has further agreed to preserve all large trees located within the building footprint where possible, to provide additional buffer between the development and shoreline use for bald

eagles. A deed restriction to provide protection of mature trees to benefit bald eagles will be conveyed to lot purchasers abutting Pepper Creek. These restrictions also will be incorporated into a Home Owner's Covenants/Restrictions agreement to prohibit the cutting and/or removal of mature trees at lot numbers: 2- 7, 9-13, and 15-24, located along the shoreline of Pepper Creek (Appendix B).

STATUS OF THE SPECIES/CRITICAL HABITAT

Life History

With a wingspan of 6.5 feet, the bald eagle is one of the largest birds of prey found in North America. It is often found near large bodies of water, associated with shoreline habitats near estuaries, rivers and lakes. Adult eagles are easily recognized by their distinctive white head and tail feathers. Juvenile birds are dark brown during their first year of life, transitioning into a mottled brown plumage. The fully capped white head appears at sexual maturity usually at age four to five. The diet of the bald eagle consists largely of fish, eel, and turtles throughout the spring and summer months. During winter months bald eagles adapt to seasonal changes in prey availability by shifting their diet to include waterfowl and small mammals.

For foraging and nesting, eagles generally prefer undisturbed forested habitats away from other types of human development and associated activities. Eagles generally avoid areas of human activity (Fraser, 1985; Chandler *et al.* 1995). The selected nest tree usually extends above the forest canopy, usually less than a mile distance to water. In the Chesapeake Bay region, eagles prefer live trees, such as, loblolly pine (*Pinus taeda*) 70% of the time but often select deciduous trees. Mature Tulip poplar (*Liriodendron tulipifera*), American beech (*Fagus grandifolia*), white and red oak (*Quercus* sp.), and Virginia pine (*Pinus virginianus*) are regularly used by eagles. Large sticks are placed near the top of the nest tree, usually averaging heights of 90 feet. The nest is circular to oval in shape and averages 3 to 4 feet deep by 5 feet across. Eagles will usually occupy the same nest tree for several years but will relocate to other areas within the territory due to habitat loss, declines in food production, and human disturbance. Destruction of nests by weather conditions and the presence of external parasites, may also account for building alternate nests.

Adult eagles mate for life, establishing nesting territories that they return to each year. Nesting pairs may remain near their territory year round, especially towards the southern end of the species range. In Maryland, nest building and repair usually begin in late November or December. One to three egg clutches are laid between February and late March. However eggs can be laid as late as the end of April if an earlier nesting attempt fails. Most eggs hatch between March and early May and eaglets remain in the nest for 11 to 12 weeks. Eggs or young within the first three weeks of hatching are highly susceptible to wind-chill or even death as a result of heat loss that may occur when adults are disturbed from the nest for prolonged periods. By mid-July, eaglets have mastered the skills of flight but are dependent on the parents and remain in the general vicinity of the nest for several more weeks. After this time, most young have dispersed

from the nest site to other areas of the Chesapeake Bay region and possibly further.

Status of the Species within the Chesapeake Bay Portion of Its Range

Historically, bald eagles were abundant on the Chesapeake Bay. Eagle densities could be compared to eagle populations found in undeveloped Alaska. Based on comparisons with undisturbed shorelines elsewhere, it has been estimated that prior to European settlement total eagle numbers in the Chesapeake Bay region may have exceeded 3,000 pairs. Declines in population numbers resulted from loss of habitat due to land clearing for crops and human habitation. In the late 1940's eagle numbers were dramatically reduced through the use of the chemical insecticide DDT for crop management. By the late 1960's, breeding populations of predatory birds, such as peregrine falcons, ospreys and bald eagles had been decimated as a result of eggshell thinning (Wiemeyer *et al.* 1984). Since the nationwide ban of DDT and other chlorinated hydrocarbon pesticides, the Chesapeake Bay population has steadily increased from approximately 70 pairs in the mid 1970s to 492 pairs in 1999. Between 2000 and 2002, approximately 553 pairs had produced 805 young and 627 pairs had produced 897 young, respectively. The 2003 survey which documented approximately 850 active nests, was the last comprehensive nest survey (inclusive of MD, VA, DE, and DC) for the Chesapeake Bay region since Maryland Department of Natural Resources no longer will conduct annual nest monitoring surveys in the Maryland portion of the range.

During the period from 1978 thru 1988, no more than four territorial bald eagle pairs were documented in Delaware in any one year. Since that time, the breeding numbers have increased steadily. During the 2005 aerial survey, Delaware state biologists located a total of 37 active nests. Of these, 16 are located in Sussex County, 12 in New Castle County, and 9 in Kent County.

In addition to the resident breeding population, the Chesapeake Bay region supports more than ten bald eagle concentration areas. Collectively, these areas are known to support over a thousand non-breeding adult and sub-adult individuals during summer and winter months. Concentration areas may contain eagles in numbers ranging from smaller groups of under 20, to larger groups comprising of 150 individuals or more. Biologists believe eagles are attracted to these areas due to a combination of factors but primarily, abundance and availability of food in proximity to undeveloped forested shoreline habitats play a key role in the site selection. Mature climax-forests provide suitable perch trees for daytime loafing or overnight roosting. Telemetry studies have shown that these concentration areas support not only Bay region eagles, but considerable numbers of eagles from northern and southern states congregate here (Buehler *et al.* 1991a).

In Maryland, concentration areas include the Aberdeen Proving Ground, Blackwater National Wildlife Refuge, Indian Head (Navy Surface Warfare Center on the Potomac River) and below the Conowingo Dam on the Susquehanna River. In Delaware, a small concentration of eagles is

known to frequent an area near Rehoboth. In Virginia, five roosting sites are known to exist. Two sites have been documented on the James River, one on the Rappahannock River and at least two sites (Mason Neck; Caledon State Park) are located within the Potomac River. The closest eagle concentration area to Washington D.C. is approximately 12-14 miles south, at the Mason Neck National Wildlife Refuge and the Mason Neck State Park bordering the Potomac River in Fairfax County, Virginia.

Analysis of the species/critical habitat likely to be affected

The Chesapeake Bay bald eagle population has experienced significant growth over the past 20 years. Shoreline development throughout the Chesapeake Bay drainage can be seen as a limiting factor for the continuing expansion of the regional bald eagle population. The clearing and removal of shoreline forest for human developments will continue to permanently degrade or deplete eagle roosting and nesting habitat. Loss of suitable nesting, roosting, and foraging habitat was identified a significant threat to this population during early recovery (U.S. Fish and Wildlife Service, Recovery Plan, 1990). Between 1978 and 2020, the developed area of the Chesapeake Bay watershed was predicted to increase by 74% in Maryland and 80% in Virginia (Gray *et al.* 1998). Housing developments, business office complexes, boat marinas, among others, will increase the probability of encounters between eagles and surrounding human activity. The Service believes habitat fragmentation of forested habitats along riparian corridors in Delaware also is a growing concern and with increased development pressure the expansion of the Delaware bald eagle population will be limited.

Buehler *et al.* (1991b) found that bald eagle use of shoreline was inversely related to building density and directly related to development set-back distance. Clark (1992) found that eagle numbers decreased with increased numbers of buildings and medium duty roads. Additionally, he concluded that "increased numbers of waterfront buildings and structures combined with decreased shoreline woodland...negatively affect eagle shoreline use." Buehler *et al.* (1991b) found that in northern Chesapeake Bay, 76% of shoreline areas may now be unsuitable for eagle use because of the presence of development within 1,640 feet of the shoreline. Interactions between humans and bald eagles during the breeding season occur throughout most of the eagle's range and can be detrimental to reproductive success (Fyfe and Olendorff 1976; Fraser 1985). In a study in Arizona, bald eagles were more easily disturbed when foraging than nesting and showed the greatest adverse response to pedestrian and vehicle movement than aircraft noise (Grubb and King, 1991). A study in north central Michigan revealed similar frequencies of disturbance from pedestrian and vehicle movement although aircraft and aquatic activities were more common. Within 75% of these interactions, the eagles reacted at 500 meters and initiated flight responses at 200 meters (Grubb *et al.* 1992).

As in other parts of the United States, the effects of development to Chesapeake Bay bald eagles are well documented. Since a large percentage of eagle nests are found on private property along tributaries and shorelines of the Bay, land and water development projects continue to impact nesting and foraging eagles. Therres *et al.* (1993) concluded that "the distance of the

development activity to the nest may be more critical during the land clearing phase than during house construction." In a case study, nests were abandoned up to 1,200 feet (366 m) from clearing operations while house construction was tolerated as close as 260 feet (79 m) in several cases. Nest abandonment most often occurred at locations where there was a direct line-of-sight between the eagles' nest and the activity (i.e., lack of a wooded visual buffer).

Boating activities are likely to adversely impact eagles because they disrupt feeding activity and affect large areas in short periods of time (Knight and Knight 1984). Buehler *et al.* (1991b) found that on the northern Chesapeake Bay, eagles were flushed by an approaching boat at an average distance of 575 feet. Recreational fishing boats, sport boats and commercial boats contribute to foraging disturbances to eagles. However, fishing boats were observed to leave the main channel more often and navigate closer to shallow water habitats. This combined with peak fishing hours after dawn suggests greater opportunity to disturb perched and foraging eagles (Watts and Whalen 1997).

There is new information from the Chesapeake Bay area and other recovery regions, that suggests bald eagles, in some places, may be more adaptable and tolerant of development than previously thought. In 1994, an eagle pair nesting along the Potomac River at Mason Neck, Virginia, built a nest in an established residential community within 250 feet of an occupied dwelling and other homes between 500-700 feet. A formal consultation between the Service and the developer allowed for the construction of an additional house, outside of the nesting season, at the same distance from the nest tree as other homes that pre-dated the arrival of the eagle pair. The eagles returned to the modified landscape, nested in the same tree and produced triplets that season. In 1997, a similar situation occurred near Dover, Delaware, where an eagle pair was documented to nest within a narrow ridge of trees abutting an open field. The nest tree was approximately 82 feet from the corner of an occupied residence within an existing residential community. The pair had an affinity to this site, continuing to use the same nest site from 1998 through 2002, despite activities of two other subdivision projects close by (C. Koppie, USFWS, 1995, 1997, pers. observ.). From 2002-2004, several other nesting pairs of eagles have demonstrated increased tolerance to human activities. In 2004, a pair constructed an alternate nest in an oak tree in the backyard of an occupied single-family home. The nest, situated in a solitary tree, was located directly above a playground swing set and sand box and within 60 feet of a neighbor's swimming pool. The acclimated pair successfully fledged three young (C. Koppie, USFWS, 2005, pers. observ.).

Recovery Goals and Accomplishments

The southern population of the bald eagle was federally listed as endangered in 1967, with ESA protection extended to all other populations in the coterminous United States by 1978. The Service grouped these populations into five distinct recovery regions; Chesapeake Bay, Pacific, Southeast, Northern and Southwest and adopted recovery plans for each.

Delisting of the Chesapeake Bay bald eagle would require (1) a nesting population of 300-400

pairs with an average productivity of 1.1 eaglets per nest, sustained over 5 years and (2) permanent protection of sufficient habitat to support this number of nesting pairs. Additionally, there must be enough roosting habitat to accommodate population levels commensurate with increases throughout the Atlantic region resulting from increased productivity (U.S. Fish and Wildlife Service, 1990). Since 1992, the numbers of breeding pairs and nest productivity (300, 1.1, respectively) have been met, and limited land acquisition has taken place in known eagle concentration areas. The bald eagle was reclassified to “threatened” in August 1995 for all eagle populations in the lower 48 states. The Service now believes the Chesapeake Bay bald eagle population has reached 1,000 nesting pairs. The Service published a proposed rule to delist the bald eagle in the Federal Register in the summer of 1999. Since the publication of the 1999 proposed delisting, Service programs have been working together to provide a process for how protections under the Bald and Golden Eagle Protection Act (BGEPA) would be implemented after ESA delisting. In addition to protection under the ESA, the Bald and Golden Eagle Protection Act protects bald eagles throughout their range, including those bald eagles found in Alaska.

ENVIRONMENTAL BASELINE

As defined in the Service’s consultation regulations, “environmental baseline” includes the past and present impacts of all Federal, State or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in that action area that have already undergone formal or early consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. 50 C.F.R. § 402.02. “Action” means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies in the United States or upon the high seas. The “action area” is defined as all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. The environmental baseline represents the most current snapshot of the project, the landscape, and the status of resources in the action area.

Current Status of Bald Eagles in the Action Area

The ESA section 7 regulations requires review of both direct, indirect affects, interrelated and interdependent activities, along with cumulative effects to determine the impacts from these activities on listed species.

The landscape of the project area is categorized as rural farmland and the entire southern portion of the property abuts Pepper Creek. The project site encompasses approximately 148 acres which consist of 128 agricultural acres, 11 acres of mixed-hardwood forest, and 9 acres of former timbered forest. The property had been primarily used in agricultural production of corn and/or soybean. A narrow forested buffer, approximately 150 feet wide at the deepest point, exists between the agricultural field and Pepper Creek. This area is commonly known as Kildee Point, located at the southern portion of the property and contains numerous mature oak species and loblolly pine. Across Pepper Creek, are three existing residential communities known as

Gulls Way Campground, Helms Landing, and The Point Farm. A commercial boat yard is located approximately 1,000 feet east of the former bald eagle nest “A” and a community boat slip is located approximately the same distance across Pepper Creek near the Gulls Way Campground. The Point Farm community consists of several developed and undeveloped one-acre lots. The eagles constructed a nest at an undeveloped lot at The Point Farm subdivision during 2004-2005.

The nesting territory at Pepper Creek has been in existence since 1996. The nest tree selected is usually a tall loblolly pine within the vicinity of agricultural and shoreline activities at Pepper Creek. The pair appears to be acclimated to limited recreational boating and agricultural practices that occur close by since annual nest productions have yielded successful breeding and rearing of young each year. The primary nest (nest “A”) at Kildee Point, was consistently used by the pair up to and including, the 2002-2003 nesting season. In 2002, the property owner had cleared a small portion of forested habitat located along Pepper Creek, outside of the nesting season, some of which was located within the designated eagle nest protection buffer. An investigation was conducted by the Services Division of Law Enforcement that resulted in no further land clearing without a formal consultation. The pair returned during late fall and re-occupied the nest and successfully fledged three young.

During the winter of 2003, the pair moved westward approximately 1,500 feet along the shoreline of Pepper Creek and built a second nest (“B”) on an isolated loblolly pine approximately 200 feet from the main channel of Pepper Creek (figure 2). The nest was clearly visible to boaters, as was nest “A”. The pair successfully raised and fledged young from both nest sites, but decided to relocate to an area across the Pepper Creek. During the 2004-2005 nesting period, the Service received a call from DNREC regarding an observation of an eagle carrying sticks to a forested area across Pepper Creek to the Point Farm subdivision area. The pair was actively constructing a new nest (nest “C”) at the time property owners of the lot were beginning to clear trees for construction of a single-family home (figure 3). The pair laid eggs at this nest site, but was evidently unsuccessful in rearing young that year. Despite these preferences in nest site location, the eagle pair consistently favored perch trees distributed along the southern property of the project site, with a greater frequency at Kildee Point, near former nest “A”.

Nest “A” has been inactive for three consecutive nesting seasons. Furthermore, there is no longer an evidence of a nest structure at this location (C. Koppie, USFWS, pers. observ., 2005). Nest “B” was inactive during the 2004-2005 nesting season and it appears this nest will be vacant during the 2005-2006 nesting season. Should the pair not occupy nest “B”, to be determined at the end of February 2006, the Service shall waive the time-of-year restriction for proposed activities for the project for that nesting season.

EFFECTS OF THE ACTION

This section includes an analysis of the direct and indirect effects of the proposed action on the species and/or critical habitat, and its interrelated and interdependent activities.

Direct Effects

During the 2004 nesting season, the Pepper Creek project was the subject of potential adverse impacts to two bald eagle nests (“A” and “B”). Both nests were built by the same resident pair of bald eagles. As discussed earlier, nest “A” will no longer be subjected to regulatory review, since three consecutive years of inactivity have been documented there (FWS Chesapeake Bay Bald Eagle Guidelines). However, the mature trees in this former nesting territory have been demonstrated to serve as an important perching area for foraging and/or roosting no matter where the pair chose to nest at Pepper Creek. Therefore, the effects analysis will focus on potential impacts from shoreline stabilization and residential construction to the nesting pair, at nest “B”.

During the 2002-2003 nesting season, the pair selected a prominent loblolly pine near the Pepper Creek shoreline to build a new (alternate) nest. Nest site “B” can be easily observed from the project site or several areas from Pepper Creek where human activity (e.g., farming, recreational boating) can be observed by the eagles. The nest tree is visually screened by only two other trees. As discussed earlier, the existing nest (nest “B”) was inactive during the 2004-2005 nesting season and again, may be inactive during the 2005-2006 nesting season.

Shoreline stabilization – A time of year restriction from activities within 1,320 feet of nest “B” during the nesting season will commence should it be determined the nest is occupied. Construction activities and build-out for the revetment during the non-nesting season will not adversely affect the bald eagle pair.

Subdivision development – The project development will not require removal of forested habitat within the secondary protection zone, since this is an agricultural field and no trees currently exist. Phasing the development to allow for construction of houses within the secondary protection zone (750-1,320 feet) outside of the nesting period (December 15-June 15) will not result in direct impacts to the nesting pair. As described in the BA, the developer plans to initiate development of Phase II during the 2007-2008 period and Phase III during the 2008-2009 period.

Indirect Effects

Indirect effects are defined as those that are caused by the proposed action(s) and are later in time, but still are reasonably certain to occur (50 CFR 402.02).

The Service believes that nest “B”, may not remain a preferred nesting location for the bald eagle pair. Given the fact nest “B” was used for only one nesting season and the pair chose to relocate to other wooded habitat across Pepper Creek, suggests the eagles would prefer to nest

within a forested buffer. The solitary nest tree in the agricultural field may not provide an adequate buffer to protect the pair during nesting from natural elements or possibly, the current level of human disturbance in the Pepper Creek area. It is likely that the change in land use designation from farming to that of a residential development, with additional human disturbance after occupancy, will result in a permanent vacancy of nest “B” into the foreseeable future. The Service recognizes that the tree conservation measures to be implemented by the developer are to offset impacts to nest “B” and potentially other nests at the project site, should the eagle pair relocate to other areas on the Timmons’ property during construction.

Interdependent/Interrelated Effects

Effects of the action include not only direct and indirect effects, but analysis of the effects of those actions that are interrelated and interdependent with the proposed action. An interrelated activity is one that is part of the proposed action and depends on the proposed action for its justification. An interdependent activity is one that has no independent utility apart from the proposed action under consultation. Currently, the Service is unaware of any other project that would be considered interdependent or interrelated to the Pepper Creek residential subdivision.

CUMULATIVE EFFECTS

Cumulative effects include the impacts of future State, local, or private actions that are reasonably certain to occur in the action area.

There are at least two other known project proposals for developments near the action area of Pepper Creek. A low density subdivision proposed along the east property boundary will involve large residences on one or more acre lots. This project also will include restoring/improving an existing marina at the north side of the Pepper Creek shoreline. The Service also is aware of a new home construction at the Point Farm subdivision which may affect nest “C” of this bald eagle pair which will require a separate ESA consultation.

CONCLUSION

The Service concludes in its biological opinion, that actions at Pepper Creek are not likely to jeopardize the continued existence of the bald eagle. This determination is based upon and supported by the Service’s review of the current status of the bald eagle throughout its range and in the action area, especially its expansion and nesting success within the Chesapeake Bay recovery area, as well as the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects. No critical habitat has been designated for this species therefore, none will be affected.

III. INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of the ESA, as amended, prohibit taking (harass, harm, pursue, hunt, shoot, wound, kill, trap capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns such as breeding, feeding, or sheltering. Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns, which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the federal agency or applicant. Under the terms of Section 7(b)(4) and Section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The Service anticipates “take”, through either habitat encroachment, harassment, or both, and will likely result in avoidance of nest “B” by the eagle pair. Should nest “B” not be occupied during the 2006-2007 nesting season, nest buffer and time-of-year restrictions from activities will be lifted however, conservation measures to protect trees, including the nest tree on the project site, will remain in effect. Given the unpredictable behavior of the eagle pair, the remaining possibilities are that the eagles may either continue to utilize nest “C” at The Point Farm subdivision (or other off-site areas) or return to other forested areas within the project limits during or after completion of the residential development. By implementing protection measures such as, time-of-year restrictions for construction activities and maintaining sufficient buffer distances around the nest(s), the developer will be able to complete construction of all phases of the residential subdivision while allowing eagles to continue to nest and forage along the waters of Pepper Creek. Therefore, incidental take will include nest “B” and any additional nest constructed by the eagle pair within the project limits during the 10 year project construction period.

REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize impacts of incidental take of bald eagles.

- conduct construction activities in a manner to minimize impacts to bald eagles;
- protect forested shoreline habitat along Pepper Creek to provide permanent benefits for bald eagles utilizing Pepper Creek.

TERMS AND CONDITIONS

In order to be exempt from prohibitions of Section 9 of the ESA, the Corps will comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline the required reporting requirements. These terms and conditions are nondiscretionary.

- 1) Prior to initiation of Phase I, and up through the 2006-2007 nesting season, the developer will erect and maintain a perimeter fence (i.e., orange, plastic deterrent fence) 330-foot around nest “B” and post “no-entry” signs to protect the nest from human disturbance.
- 2) If nest “B” is determined active by the Service or Delaware Department of Natural Resources and Environmental Control during the 2005-2006 nesting season, implement a time-of year restriction from construction activities (e.g., shoreline stabilization work, road development, or house construction) within the designated nest protection zones during the nesting season (December 15 – June 15).
- 3) If nest “B” is determined inactive during the 2005-2006 nesting season, construction activities may resume up to, and including, the primary nest protection buffer zone (0-330 feet). However, in accordance with the Bald Eagle and Golden Eagle Protection Act, the nest tree including any new bald eagle nest trees within the project area, must remain undisturbed.
- 4) Within 24 hours upon observation of a bald eagle nesting or attempts to relocate to another area to construct a nest within the project limits, or within 1,320 feet of the Timmons’ property, contact the FWS, Chesapeake Bay Field Office at 410/573-4500 and implement the following procedures:
 - a) The developer will observe a time-of-year restriction for construction activities near the nest and be advised by the Service on minimization measures to “reconcile” nest protection buffer distances. These minimization measures will be based on the level of on-going building infrastructure and construction activity at that time.
 - b) Routine construction activities may resume after the nesting season (December 15-June 15) within the designated nest buffer protection zones (1, 2, and 3).
- 5) Developer will ensure building contractors and lot purchasers are informed of the protection status of bald eagle nest trees and prohibitions on removal of living trees greater than 14 inch diameter-at-breast height within 50 feet of the Pepper Creek shoreline inclusive of lots 2-7, 9-13, and 15-24. This provision does not include diseased, dead, or dying trees that pose a hazard to persons or property.
- 6) Prior to construction activities, developer/seller will convey bald eagle tree protection

and conservation measures (excluding any diseased, or dead trees that pose a hazard to persons or property) through the recordation of a deed restriction, filed with Sussex County, and included in the Home Owners' Association "Covenants and Restrictions" for purchasers of lot numbers; 2-7, 9-13, and 15-24. A copy of the recorded deed restriction will be provided to the Service's Chesapeake Bay Field Office.

7) Report any incident involving bald eagle injuries or mortalities to the USFWS' Chesapeake Bay Field Office at 410/573-4500 or Division of Law Enforcement at 410/962-7980.

IV. CONSERVATION RECOMMENDATION

The Service recommends the developer, in coordination with the Home Owner's Association, promote bald eagle conservation and awareness with lot owners to ensure continued nesting success of the bald eagle, our national symbol, at Pepper Creek.

V. REINITIATION- CLOSING STATEMENT

This concludes formal consultation on the action requested by the Army. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over the action has been retained and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have questions or concerns regarding this document, please contact Craig Koppie, at 410/573-4534, of the Threatened and Endangered Species Program.

Sincerely,

John Wolflin,
Supervisor

Enclosures

cc: Andrew Timmons/Stephen Parsons
Karen Bennett, DNREC
Margaret Strand, VENABLE, LLP

VI. LITERATURE CITED

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Figure 1. Proposed Residential Community and Shoreline Protection Plan at Pepper Creek, Delaware

Figure 2. Proposed Pepper Creek Subdivision Plan and Bald Eagle
Nests "A" and "B"

Figure 3. Pepper Creek Residential Communities and Bald Eagle Nest “C”

APPENDIX A

CONSULTATION HISTORY

<u>Date</u>	<u>Description</u>
June 9, 2000	Letter from DNREC to CBFO to inform the agency of the proposed Pepper Creek Subdivision
August 25, 2000	Letter from consultant (Atlantic Resource Management, Inc.) to CBFO describing preliminary site plans, project limits and request for ESA guidance
October 4, 2000	Telecom from Steve Parsons to CBFO to discuss bald eagle nest issue
March 7, 2001	Note to File regarding site visit (March 7, 2001) which described discussion of protection measures for nesting bald eagles with developers
May 29, 2001	Letter from Consultant summarizing site visit (March 7, 2001)
August 13, 2001	Telecom from DNREC to CBFO regarding tree clearing at Pepper Creek at the nest site
August 14, 2001	Note to File regarding site visit with LE Agent to investigate cutting of trees within the primary protection buffer of the eagle nest
September 5, 2001	Copy of letter from CBFO to Mr. Bernard Timmons, developer, advising him to refrain from further tree cutting
October 1, 2001	Voice mail message from Mr. Timmons to return call
October 10, 2001	Telephone conversion between Mr. Timmons and CBFO personnel describing potential development plan, but had not submitted to Sussex County Planning and Zoning
November 30, 2001	Site visit with FWS Agent Jordon. Appears the eagle pair has returned and is rebuilding nest. Meet with John

	Timmons' (son) who stated preliminary site plan submitted to the Sussex County Planning and Zoning
April 8, 2002	Telephone message from Consultant stating the developer plans to plant corn/soybean on 148 acres leaving 100-foot grass buffer
April 8, 2002	Telephone message from DNREC regarding aerial survey depicted two eaglets in the nest
September 18, 2002	E-mail from Andrew Timmons requesting clarification for limits of development that would not impact the nesting eagles
November 28, 2003	Note to File regarding LE/CBFO investigation of the Pepper Creek project- habitat disturbance near the eagle nest
November 28, 2003	E-mail to CBFO, Deputy Project Supervisor, and project Attorney for Pepper Creek project with notification of a complaint from DNREC about habitat disturbance near the nest tree
December 1, 2003	E-mail response from Project Attorney regarding tree clearing in the nest vicinity
December 9, 2003	Meeting at CBFO between Timmons group, project Consultant, (Biological Research Associates), project Attorney, and CBFO staff
December 15, 2003	Site Plan submittal to CBFO, describing bald eagle protection zones and proposed utilities layout
December 2, 2004	E-mail from DNREC describing aerial nest survey at Pepper Creek. The nesting pair has moved approximately 1000 feet upstream in a lone pine tree on the waterfront of the Timmons's property
March 2, 2004	E-mail from DNREC stating new (alternate) nesting location
May 12, 2004	E-mail reply to DNREC regarding project changes now require a Corps permit. Service will require the Corps to

	initiate formal section 7, as required under ESA
January 18, 2005	Copy of shoreline stabilization and restoration transmittal to Corps for Individual Permit application
March 10, 2005	Copy of revised Figures 3-6 from Coastal and Estuarine Research, Inc., depicting correct number of nest "A" and nest "B"
August 1, 2005	Letter from project attorney (VENABLE, LLP) requesting rough grading near nest "B" up through December 1, 2005
August 8, 2005	Telecom between Timmons and CBFO biologist discussing the need to protect forested shoreline habitat for eagles, in particular, trees at former nest #A
August 10, 2005	Letter from Corps and client's Biological Assessment requesting formal Section 7 Consultation
August 17, 2005	Telecom between project attorney CBFO requesting no grading until reviewed on site
August 17, 2005	Copy of National Harbor Biological Opinion sent to Andrew Timmons per request
September 19, 2005	E-mail response to Andrew Timmons describing "take prohibitions" under the ESA and when a consultation and permit may be required
September 22, 2005	Site visit to determine Tree Preservation Plan to provide immediate and long-term protection for bald eagles
October 11, 2005	E-mail to Andrew Timmons requesting revised portion of the Pepper Creek Biological Assessment
October 14, 2005	Letter from project attorney to CBFO with "Supplement to Biological Assessment"
October 21, 2005	E-mail for Andrew Timmons regarding time-frame for consultation and pending Incidental Take Statement
October 27, 2005	E-mail from Andrew Timmons requesting concurrence letter to Sussex County Planning and Zoning from the

	Service to begin work outside of nesting area
November 4, 2005	Response letter from the Service to Andrew Timmons to beprovided to Sussex County Planning and Zoning
December 21, 2005	Service's draft Biological Opinion completed and sent to the Corps (action agency) and Developer for review and comment
January 17, 2006	Comments on draft BO from VENABLE (developer's Law Firm)

APPENDIX B PEPPER CREEK SUBDIVISION PLAT

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jw

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